



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,157	10/26/2001	Koji Tashiro	SCEI 3.0-094	7039

530 7590 04/30/2004

LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER

VITAL, PIERRE M

ART UNIT	PAPER NUMBER
----------	--------------

2188

40

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,157

Applicant(s)

TASHIRO ET AL.

Examiner

Pierre M. Vital

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) 13 and 15 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12, 14 and 16-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8.9.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Application No. 10/033,157 filed October 26, 2001. Claims 1-19 are pending in this application.
2. The specification and the claims have been examined with the results that follow.

Information Disclosure Statement

3. The information disclosure statement filed May 29, 2002 (Paper No. 8) and January 26, 2004 (Paper No. 9) complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Accordingly, the examiner is considering the information disclosure statement.

Response to Preliminary Amendment

4. Claims 1-19 have been presented for examination in this application. In the preliminary amendment, claims 1-12, 14 and 16 have been amended. Claims 13 and 15 have been canceled. Claims 17-19 have been added. As a result, claims 1-12, 14, and 16-19 are now pending in this application.
5. The Amendment to Fig. 4 of the drawings and to the specification filed February 20, 2002 has been reviewed and approved by the Examiner.

Claim Objections

6. Claim 11 is objected to because of the following informalities:

In line 4, it appears that "andto adopt" should be changed to --and to adopt--.

Appropriate correction is required.

Specification

7. The disclosure is objected to because of the following informalities:

On page 14, line 19, it appears that "number 1023" should be changed to --number 1024--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 5, 9, 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner et al. (US6,532,517).

As per claim 1, Wagner discloses a method for creating a partition in a storage device, the method comprising limiting a size of a *partition to be* created to a size of m to n-th power, wherein m and n are natural numbers [*each sector holds 512 bytes*; col. 1, lines 32-35]; and disposing the partition to be created at a position aligned with the size of the partition [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

As per claim 5, Wagner discloses a storage medium containing a computer program for causing a computer to execute actions comprising receiving a request to create a partition having a size of m to n -th power, where m and n are natural numbers [*each sector holds 512 bytes*; col. 1, lines 32-35]; and creating the partition in a region on a storage device, the region being in a position that is aligned with the received size [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

As per claim 9, Wagner discloses an information processing apparatus, comprising means for receiving a request to create a partition having a size of m to n -th power, where m and n are natural numbers [*each sector holds 512 bytes*; col. 1, lines 32-35]; and means for creating the partition in a region on a storage device, the region being in a position that is aligned with the received size [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

As per claim 14, Wagner discloses a storage device comprising: a plurality of created partitions, and a management region which manages a size and position of each created partition, wherein the management region includes size information and position information therein, the size information indicates that each created partition has a size of m to the n -th power, m and n are natural numbers [col. 6, lines 30-47; *each sector holds 512 bytes*; col. 1, lines 32-35], and the position information indicates that each

Art Unit: 2188

created partition is disposed at a position aligned with the size of the partition [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

As per claim 16, Wagner discloses a method comprising recording data on a storage device, wherein the data manages a size and position of created partitions on the storage device, the data includes size information and position information [col. 6, lines 30-47], the size information indicates that each created partition has a size of m to n -th power, m and n are natural numbers [*each sector holds 512 bytes*; col. 1, lines 32-35], and the position information indicates that each created partition is disposed at a position aligned with the size of the partition [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

As per claim 17, Wagner discloses a storage device having a partition that is created according to a method comprising limiting a size of the partition to be created to m to n -th power, wherein m and n are natural numbers [*each sector holds 512 bytes*; col. 1, lines 32-35]; and disposing the partition to be created at a position in the storage device that is aligned with the size of the partition [*controller 26 stores the partition file in a contiguous series of storage locations on the storage disk by determining if there is a contiguous series of storage locations corresponding to the size of the partition*; col. 8, lines 48-65].

10. Claims 2, 3, 6, 7, 10, 11, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Collins et al. (US6,490,670).

As per claim 2, Collins discloses a method for creating a partition in a storage device, the method comprising receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers [col. 4, lines 50-53]; and referring to a table containing disposition information of partitions in the storage device [free list 302; Fig. 3; col. 5, lines 50-53], determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region [col. 5, lines 35-49], determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device [col. 5, lines 50-56], and disposing the partition in a region where a partition can be created, the region being a position that can be aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size [col. 5, lines 9-22, 57-63].

As per claim 3, Collins discloses the step of receiving the request to create a partition includes receiving a request to create a partition of an arbitrary size, and

adopting, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request [col. 4, lines 55-57].

As per claim 6, Collins discloses a storage medium containing a computer program for causing a computer to execute actions comprising receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers [col. 4, lines 50-53]; and referring to a table containing disposition information concerning a partition in a storage device [*free list* 302; Fig. 3; col. 5, lines 50-53], determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region [col. 5, lines 35-49], determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device [col. 5, lines 50-56], and disposing the partition in a region where a partition can be created, the region being a position aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size [col. 5, lines 9-22, 57-63].

As per claim 7, Collins discloses the step of receiving the request to create a partition includes receiving a request to create a partition of an arbitrary size, and adopting, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request [col. 4, lines 55-57].

As per claim 10, Collins discloses an information processing apparatus, comprising means for receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers [col. 4, lines 50-53]; and means for referring to a table containing disposition information concerning partitions in a storage device [*free list* 302; Fig. 3; col. 5, lines 50-53], for determining whether there is an empty region in the storage device having a size equal to the requested size, and for disposing the partition in that empty region [col. 5, lines 35-49], means for determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and if so, for successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and for disposing the partition in the divided region of the storage device [col. 5, lines 50-56], and means for disposing the partition in a region where a partition can be created, the region being a position aligned with the requested size, when there is neither a region having the requested size nor a region having mk times as large as the requested size [col. 5, lines 9-22, 57-63].

As per claim 11, Collins discloses said means for receiving a request is operable to receive a request to create a partition of an arbitrary size, and to adopt, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request [col. 4, lines 55-57].

As per claim 18, Collins discloses a storage device having a partition that is created according to a method comprising: receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers [col. 4, lines 50-53], referring to a table containing disposition information of partitions in the storage device [*free list* 302; Fig. 3; col. 5, lines 50-53], determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region [col. 5, lines 35-49], determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device [col. 5, lines 50-56], and disposing the partition in a region where a partition can be created, the region being a position that can be aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size [col. 5, lines 9-22, 57-63].

As per claim 19, Collins discloses the step of receiving the request to create a partition includes receiving a request to create a partition of an arbitrary size, and adopting, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request [col. 4, lines 55-57].

11. Claims 4, 8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Murray et al. (US6,185,666).

As per claim 4, Murray discloses a method of deleting a partition in a storage device that has a size of m to n -th power, where m and n are natural numbers, the method comprising receiving information specifying a partition to be deleted [col. 3, lines 55-61]; and referring to a table containing disposition information concerning the partition in the storage device [*partition table 406*; Fig. 4; col. 6, lines 45-49], and determining whether a region before or after the partition to be deleted is an empty region, and whether a region obtained by combining the empty region and the partition to be deleted can be aligned with a total size of the empty region and the partition to be deleted, and, if so, combining the empty region and a region having the partition deleted therefrom [col.20, lines 48-65].

As per claim 8, Murray discloses a storage medium containing a computer program for causing a computer to execute a process of deleting a partition that is in a storage device and that has a size of m to n -th power, where m and n are natural numbers [col. 19, lines 9-25; col. 7, lines 30-33], the process including receiving information specifying a partition to be deleted [col. 3, lines 55-61]; and referring to a table containing disposition information concerning the partition in the storage device [partition table 406; Fig. 4; col. 6, lines 45-49], and determining whether a region before or after the partition to be deleted is an empty region, and whether a region obtained by combining the empty region and the partition to be deleted can be aligned with a total size of the empty region and the partition to be deleted, and, if so, combining the empty region and the region having the partition deleted therefrom [col.20, lines 48-65].

As per claim 12, Murray discloses an information processing apparatus for deleting a partition in a storage device and that has a size of m to n -th power, where m and n are natural numbers, the apparatus comprising means for receiving information for specifying a partition to be deleted [col. 3, lines 55-61]; and means for referring to a table containing disposition information concerning the partition in the storage device [partition table 406; Fig. 4; col. 6, lines 45-49], and when a region before or after the partition to be deleted is an empty region, and if a region obtained by combining the empty region and the partition to be deleted is aligned with a total size of the empty region and the partition to be deleted, for combining the empty region and the region having the partition deleted therefrom [col.20, lines 48-65].

Conclusion

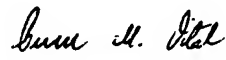
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111 (c) to consider these references fully when responding to this action. The documents cited therein teach partition creating, partition deleting and partition aligning.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre M. Vital whose telephone number is (703) 306-5839. The examiner can normally be reached on Mon-Fri, 8:30 am - 6:00 pm, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 28, 2004


Pierre M. Vital
Examiner
Art Unit 2188